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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,712

07/28/2003

Gregory A. Ehlers

4834-00009

6702

26753

7590

03/22/2007

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EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/628,712

**Applicant(s)**

EHLERS ET AL.

**Examiner**

Igor N. Borissov

**Art Unit**

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/24/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Amendment received on 11/24/2006 is acknowledged and entered. Claims 1-6, 9, 11-13, 16-20 have been amended. Claims 1-22 are currently pending in the application.

Objections to Specification and Claim Rejections under 35 USC § 112 have been withdrawn due to the applicant's amendment.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1- 6, 8-13, 15-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers et al. (US 5,572,438) in view of Humphries et al. (US 5,621,662).**

**Claims 1, 9 and 16.** Ehlers et al. (Ehlers) teaches a method and apparatus for energy management and building automation system, said system including a user interface, a utility a distribution network, a gateway node and a plurality of control nodes, said method comprising:

providing a gateway node for providing communication between the energy provider and the customer site (C. 4, L. 7-9, 15-17; Abstract);

providing a plurality of control nodes, each of a plurality of devices having a corresponding control node (C. 10, L. 32-33);

defining a program at the energy provider having a subset of the plurality of devices for which usage of the commodity may be managed by the energy provider activating the program (C. 9, L. 9-10, 51-53);

allowing the customer to selectively subscribe to the program ("generating reports for the customer" indicates business relationship between the utility provider and utility consumer) (C. 10, L. 25-31; C. 12, L. 41-42; C. 15, L. 39-41; C. 22, L. 1-4);

delivering the commodity to the subset of devices (C. 3, L. 57-65);

wherein when the customer subscribes to the program and the program is activated by the energy provider, the plurality of control nodes of the group reduce the amount of the commodity supplied to the plurality of devices to manage demand for the commodity (C. 22, L. 11; C. 19, L. 20-22; C. 1, L. 9-12).

While Ehlers teaches providing a plurality of control nodes (C. 10, L. 32-33), Ehlers does not specifically teach *structuring the plurality of control nodes into a group corresponding to the subset of the plurality of devices*.

Humphries et al. (Humphries) teaches a method and apparatus for home automation system, said home automation system comprising *a number of sub-systems, such as a security sub-system, a lighting control sub-system, and an environmental control sub-system*; a controller for providing centralized control of the sub-systems and an interface for connecting the controller to a network, and *a plurality of nodes which are located in the various sub-systems* (C. 4, L. 42-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ehlers to include *structuring the plurality of control nodes into a group corresponding to the subset of the plurality of devices*, as disclosed in Humphries, because it would advantageously allow to control a particular subset of the plurality of devices by transmitting a single control message to a corresponding set of control nodes (Humphries; C. 11, L. 27-32).

#### **Claims 2, 10 and 17.**

Ehlers teaches defining programs at the utility for controlling said plurality of devices (C. 9, L. 9). Humphries teaches structuring the plurality of control nodes into a

second group corresponding to the second subset of the plurality of devices (C. 4, L. 42-51). The motivation to combine references would be to allow to control a particular subset of the plurality of devices by transmitting a single control message to a corresponding set of control nodes.

**Claims 3.** Humphries teaches a host controller which controls both the first and second groups (C. 11, L. 27-32).

**Claims 4, 12 and 19.** Humphries teaches a host controller which controls both the first and second groups (C. 11, L. 27-32), thereby suggesting "moving" feature.

**Claims 5, 11 and 18.** Humphries teaches a host controller which controls both the first and second groups (C. 11, L. 27-32).

**Claims 6, 13 and 20.** Ehlers teaches providing an intermediate control node (second microcomputer) coupled to the gateway node and to the group of control nodes (C. 4, L. 50-55).

**Claims 8, 15 and 22.** Ehlers teaches that said nodes are arranged in a star network (C. 10, L. 35-36).

**Claims 7, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers et al. in view of Humphries et al. and further in view of Gelvin et al. (US 6,859,831).**

**Claims 7, 14 and 21.** Ehlers in view of Humphries teach all the limitations of Claims 7, 14 and 21, except specifically teaching that said nodes are arranged in a tree network.

Gelvin et al. (Gelvin) teaches a method and apparatus for home automation system including a plurality of nodes, wherein said nodes are organized in a tree

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network (C. 35, L. 39-41; C. 67, L. 54-58), as well as in a star configuration (Fig. 22; C. 25, L. 29-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ehlers and Humphries to include that said nodes are arranged in a tree network, as disclosed in Gelvin, because it would advantageously allow hierarchical decision making allowing processing at multiple steps as data progress from nodes to the gateway (Gelvin; C. 35, L. 39-48).

### ***Response to Arguments***

Applicant's arguments filed 11/24/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the prior art fails to disclose that the customers can selectively decide to subscribe to the program, it is noted that Ehlers explicitly teaches that the user can activate the program any time based on different circumstances (define the schedule of load shedding) (C. 12, L. 41-42; C. 15, L. 39-41; C. 22, L. 1-4).

In response to applicant's argument that the prior art fails to disclose that usage of the commodity be managed by the energy provider activating the program, Ehlers specifically teaches that said reduction in commodity usage is achieved by providing and installing the Ehlers system (C. 1, L. 6-24; C. 22, L. 11).

In response to applicant's argument that Humphries fails to teach or suggest that the control nodes are structured based upon a program defined by the energy provider, it is noted that Ehlers was applied for this feature (See arguments above).

In response to applicant's argument that the prior art fails to disclose defining two separate programs at the utility and allowing the customer to selectively subscribe to either the first or second program, it is noted that Humphries was applied to show

structuring the plurality of control nodes into a second group corresponding to the second subset of the plurality of devices (C. 4, L. 42-51). As per defining programs at the utility for controlling said plurality of devices per se, Ehlers discloses that feature (C. 9, L. 9).

In response to applicant's argument that Humphries fails to disclose a control node that belongs to both the first and second groups, see reasoning applied above.

In response to applicant's argument that the prior art fails to disclose that one of the control nodes can move between the first and second groups, it is noted that Humphries discloses a host controller which controls both the first and second groups (C. 11, L. 27-32), thereby suggesting "moving" feature.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

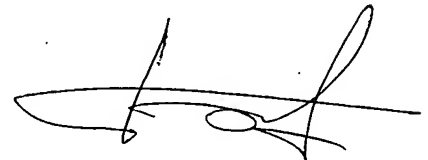
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/13/2007



IGOR N. BORISSOV  
PRIMARY EXAMINER